



## SEQUENCE LISTING

&lt;110&gt; Chen, Fang

<120> DNA MOLECULES ENCODING HUMAN NUCLEAR  
RECEPTOR PROTEINS, nNR-7 AND nNR7-1

&lt;130&gt; 20084YCA

&lt;140&gt; 10/090090

&lt;141&gt; 2002-03-04

&lt;150&gt; PCT/US98/26364

&lt;151&gt; 1998-12-11

&lt;150&gt; 09/209,069

&lt;151&gt; 1998-12-10

&lt;150&gt; 60/104,251

&lt;151&gt; 1998-10-14

&lt;150&gt; 60/069,401

&lt;151&gt; 1997-12-12

&lt;160&gt; 24

&lt;170&gt; FastSEQ for Windows Version 4.0

&lt;210&gt; 1

&lt;211&gt; 3093

&lt;212&gt; DNA

&lt;213&gt; Homo sapien (human)

&lt;400&gt; 1

tacgccaaagc	tgcgaattaa	ccctcactaa	aggggaacaaa	agctggagct	ccaccgcggt	60
ggcgcccgct	ctagaactag	tggatcccc	gggctgcagg	aattcgaatt	ctcataacct	120
atgactagga	cggaagagg	aagcactgcc	tttacttcag	tgggaatctc	ggcctcagcc	180
tgcaagccaa	gtgttcacag	tgagaaaagc	aagagaataa	gctaatactc	ctgtcctgaa	240
caaggcagcg	gctccttggt	aaagctactc	cttgatcgat	cctttgcacc	ggattgttca	300
aagtggaccc	caggggagaa	gtcggagcaa	agaacttacc	accaagcagt	ccaagaggcc	360
cagaagcaaa	cctggaggtg	agacccaaag	aaagctggaa	ccatgctgac	tttgtacact	420
gtgaggacac	agagtctgtt	cctggaaaagc	ccagtgtcaa	cgcagatgag	gaagtccggag	480
gtccccaaat	ctgccgtgta	tgtggggaca	aggccactgg	ctatcacttc	aatgtcatga	540
catgtgaagg	atgcaagggc	tttttcagga	gggcatgaa	acgcaacgcc	cggctgaggt	600
gccccctccg	gaagggcgcc	tgcgagatca	cccgggaagac	cggcgacag	tgccaggcct	660
gccgcctgcg	caagtgcctg	gagagcggca	tgaagaagga	gatgatcatg	tccgacgagg	720
ccgtggagga	gaggcgggcc	ttgatcaagc	ggaagaaaag	tgaacggaca	gggactcagc	780
cactgggagt	gcaggggctg	acagaggagc	agcggatgat	gatcagggag	ctgatggacg	840
ctcagatgaa	aacctttgac	actaccttct	cccatttcaa	gaatttccgg	ctgccagggg	900
tgtttagcag	tggctgcgag	ttgccagagt	ctctgcaggc	cccacgagg	gaagaagctg	960
ccaagtggag	ccaggtccgg	aaagatctgt	gctctttgaa	ggtctctctg	cagctgcggg	1020
gggaggatgg	cagtgtcttg	aactacaaac	ccccagccga	cagtggcggg	aaagagatct	1080
tctccctgct	gccccacatg	gctgacatgt	caacctacat	gttcaaaggc	atcatcagct	1140
ttgccaaagt	catctcctac	ttcagggaact	tgcccatcga	ggaccagatc	tccctgctga	1200
agggggccgc	tttcgagctg	tgtcaactga	gattcaaacac	agtgttcaac	gcgagactg	1260
gaacctggga	gtgtggccgg	ctgtcctact	gcttggaaga	cactgcagggt	ggcttccagc	1320
aacttctact	ggagcccatg	ctgaaattcc	actacatgct	gaagaagctg	cagctgcactg	1380
aggaggagta	tgtgctgatg	caggccatct	ccctcttctc	cccagaccgc	ccaggtgtgc	1440
tgcagcaccg	cgtggtggac	cagctgcagg	agcaattcgc	cattactctg	aagtccctaca	1500
ttgaatgcaa	tcggccccag	ctgctcata	ggttcttgtt	cctgaagatc	atggctatgc	1560
tcaccgagct	ccgcagcatc	aatgtctcagc	acaccacagc	gctgctgcgc	atccaggaca	1620

```

tacaccctt tgctacgcc ctcatgcagg agttgttcgg catcacaggt agctgagcgg 1680
ctgcccttgg gtgacacct cgagaggcag ccagacccag agccctctga gccgccactc 1740
ccgggccaag acagatggac actgccaaga gccgacaatg ccctgctggc ctgtctccct 1800
aggggaattcc tgctatgaca gctggctagc attcctcagg aaggacatgg gtgcccccca 1860
ccccagttc agtctgtagg gagtgaagcc acagattctt acgtggagag tgactgacc 1920
tgtaggctag gaccaacaga gaggcaaggt tgccctttcc ttttaaaagg ccctgtggtc 1980
tggggagaaa tccctcagat cccactaaag tgtaagggtg tgggaaggac caagcgacca 2040
aggataggcc atctgggggc tatgcccaca taccacggtt tgttcgcttc ctgagtcttt 2100
tcattgctac ctctaatagt cctgtctccc acttcccact cgttcccctc ctcttccgag 2160
ctgtttgtg ggctccaggc cgttactcat cggcagggtg atgagtatct gtgggagtc 2220
tctagagaga tgagaagcca ggaggcctgc accaaatgtc agaagcttgg catgacctca 2280
ttccggccac atcattctgt gtctctgcat ccatttgaac acattattaa gcaccgataa 2340
taggtagcct gctgtggggg atacagcatt gactcagata tagatcctga gctcacagag 2400
tttatagtta aaaaaacaaa cagaaacaca aacaatttgg atcaaaagga gaaatgataa 2460
gtgacaaaag cagcacaagg aatttccctg tgtggatgct gagctgtgat ggcgggcact 2520
gggtacccaa gtgaagggtc ccgaggacat gagtctgtag gagcaagggc acaaactgca 2580
gctgtgagtg cgtgtgtgtg atttgggtga ggtagggtctg tttgccactt gatggggcct 2640
gggtttgttc gggtccaggc aatgctgggt atgctctgtg acaaggctac gctgacaatc 2700
agttaaacac accggagaag aaccatttac atgcacctta tatttctgtg tacacatcta 2760
ttctcaaagc taaagggtat gaaagtgcct gccttgttta tagccacttg tgagtaaaaa 2820
tttttttgca ttttcacaaa ttatacttta tataaggcat tccacacctta agaactagtt 2880
ttgggaaatg tagccctggg tttaatgtca aatcaaggca aaaggaatta aataatgtac 2940
ttttggctag aggggtaaac ttttttgccc tttttctggg gaaaataatg tgggggtgtg 3000
ggaattcgaa ttcgatatca agcttatcga taccgtcgac ctcgaggggg ggcccgggtac 3060
ccaattcgcc ctatagttag tcgtattaca att 3093

```

<210> 2  
 <211> 466  
 <212> PRT  
 <213> Homo sapien (human)

```

<400> 2
Ser Ile Leu Cys Thr Gly Leu Phe Lys Val Asp Pro Arg Gly Glu Val
 1           5           10          15
Gly Ala Lys Asn Leu Pro Pro Ser Ser Pro Arg Gly Pro Glu Ala Asn
 20          25          30
Leu Glu Val Arg Pro Lys Glu Ser Trp Asn His Ala Asp Phe Val His
 35          40          45
Cys Glu Asp Thr Glu Ser Val Pro Gly Lys Pro Ser Val Asn Ala Asp
 50          55          60
Glu Glu Val Gly Gly Pro Gln Ile Cys Arg Val Cys Gly Asp Lys Ala
 65          70          75          80
Thr Gly Tyr His Phe Asn Val Met Thr Cys Glu Gly Cys Lys Gly Phe
 85          90          95
Phe Arg Arg Ala Met Lys Arg Asn Ala Arg Leu Arg Cys Pro Phe Arg
100         105         110
Lys Gly Ala Cys Glu Ile Thr Arg Lys Thr Arg Arg Gln Cys Gln Ala
115         120         125
Cys Arg Leu Arg Lys Cys Leu Glu Ser Gly Met Lys Lys Glu Met Ile
130         135         140
Met Ser Asp Glu Ala Val Glu Glu Arg Arg Ala Leu Ile Lys Arg Lys
145         150         155         160
Lys Ser Glu Arg Thr Gly Thr Gln Pro Leu Gly Val Gln Gly Leu Thr
165         170         175
Glu Glu Gln Arg Met Met Ile Arg Glu Leu Met Asp Ala Gln Met Lys
180         185         190
Thr Phe Asp Thr Thr Phe Ser His Phe Lys Asn Phe Arg Leu Pro Gly
195         200         205
Val Leu Ser Ser Gly Cys Glu Leu Pro Glu Ser Leu Gln Ala Pro Ser
210         215         220
Arg Glu Glu Ala Ala Lys Trp Ser Gln Val Arg Lys Asp Leu Cys Ser
225         230         235         240

```

Leu Lys Val Ser Leu Gln Leu Arg Gly Glu Asp Gly Ser Val Trp Asn  
 245 250 255  
 Tyr Lys Pro Pro Ala Asp Ser Gly Gly Lys Glu Ile Phe Ser Leu Leu  
 260 265 270  
 Pro His Met Ala Asp Met Ser Thr Tyr Met Phe Lys Gly Ile Ile Ser  
 275 280 285  
 Phe Ala Lys Val Ile Ser Tyr Phe Arg Asp Leu Pro Ile Glu Asp Gln  
 290 295 300  
 Ile Ser Leu Leu Lys Gly Ala Ala Phe Glu Leu Cys Gln Leu Arg Phe  
 305 310 315 320  
 Asn Thr Val Phe Asn Ala Glu Thr Gly Thr Trp Glu Cys Gly Arg Leu  
 325 330 335  
 Ser Tyr Cys Leu Glu Asp Thr Ala Gly Gly Phe Gln Gln Leu Leu Leu  
 340 345 350  
 Glu Pro Met Leu Lys Phe His Tyr Met Leu Lys Lys Leu Gln Leu His  
 355 360 365  
 Glu Glu Glu Tyr Val Leu Met Gln Ala Ile Ser Leu Phe Ser Pro Asp  
 370 375 380  
 Arg Pro Gly Val Leu Gln His Arg Val Val Asp Gln Leu Gln Glu Gln  
 385 390 395 400  
 Phe Ala Ile Thr Leu Lys Ser Tyr Ile Glu Cys Asn Arg Pro Gln Pro  
 405 410 415  
 Ala His Arg Phe Leu Phe Leu Lys Ile Met Ala Met Leu Thr Glu Leu  
 420 425 430  
 Arg Ser Ile Asn Ala Gln His Thr Gln Arg Leu Leu Arg Ile Gln Asp  
 435 440 445  
 Ile His Pro Phe Ala Thr Pro Leu Met Gln Glu Leu Phe Gly Ile Thr  
 450 455 460  
 Gly Ser  
 465

<210> 3  
 <211> 18  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Oligonucleotide

<400> 3  
 cttcaatgtc atgacatg

18

<210> 4  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Oligonucleotide

<400> 4  
 ccaaattctgc cgtgtatgtg

20

<210> 5  
 <211> 19  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Oligonucleotide

<400> 5

gtcagtgcac tctccacgt 19

<210> 6  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 6  
tgcagctggt ccaccacgcg 20

<210> 7  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 7  
gggtatgctc tgtgacaag 19

<210> 8  
<211> 19  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 8  
aggcaggcac tttcatacc 19

<210> 9  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 9  
tttcgagctt ccaggttcat 20

<210> 10  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide

<400> 10  
ctcccaaact ctgcctggtg 20

<210> 11  
<211> 20  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Oligonucleotide  
  
<400> 11  
cgggagccac acttcacccat 20  
  
<210> 12  
<211> 20  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Oligonucleotide  
  
<400> 12  
gctcacttct gcgctgtctg 20  
  
<210> 13  
<211> 20  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Oligonucleotide  
  
<400> 13  
ttccgggctc ccagagtcac 20  
  
<210> 14  
<211> 20  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Oligonucleotide  
  
<400> 14  
cagaagacct gcctgatctg 20  
  
<210> 15  
<211> 20  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Oligonucleotide  
  
<400> 15  
gaaatgaact ccttcacatc 20  
  
<210> 16  
<211> 20  
<212> DNA  
<213> Artificial Sequence  
  
<220>  
<223> Oligonucleotide  
  
<400> 16  
ccggatctgt ggggtgtgtg 20  
  
<210> 17

<211> 2850  
 <212> DNA  
 <213> Homo sapien (human)

<400> 17

tccatcctaa	tacgactcac	tatagggctc	gagcgggccgc	ccgggaggt	cttttggcct	60
gctgggttag	tgctggcagc	cccctgaggg	caaggacagc	agcatgacag	tcaccaggac	120
tcaccacttc	aaggaggggt	ccctcagagc	acctgccata	cccctgcaca	gtgctgcggc	180
tgagttggct	tcaaaccatc	caagagggcc	agaagcaaac	ctggagggtga	gacccaaaga	240
aagctggaac	catgctgact	ttgtacactg	tgaggacaca	gagtctgttc	ctggaaagcc	300
cagtgtcaac	gcagatgagg	aagtccggagg	tccccaatc	tgccgtgtat	gtggggacaa	360
ggccactggc	tatcacttca	atgtcatgac	atgtgaagga	tgcaagggtc	ttttcaggag	420
ggccatgaaa	cgcaacgccc	ggctgaggtg	ccccttccgg	aagggcgcc	gcgagatcac	480
ccggaagacc	cggcgacagt	gccaggcctg	ccgcctgcgc	aagtgcctgg	agagcggcat	540
gaagaaggag	atgatcatgt	ccgacgaggg	cgtggaggag	aggcgggcct	tgatcaagcg	600
gaagaaaagt	gaacggacag	ggactcagcc	actgggagtg	caggggctga	cagaggagca	660
ggcgatgatg	actgaggagc	tgatggacgc	tcagatgaaa	acctttgaca	ctaccatttc	720
ccatttcaag	aattttccggc	tgccaggggt	gcttagcagt	ggctgcgagt	tgccagagtc	780
tctgcaggcc	ccatcgaggg	aagaagctgc	caagtggagc	caggtccgga	aagatctgtg	840
ctctttgaag	gtctctctgc	agctgccccg	ggaggatggc	agtgtctgga	actacaaacc	900
cccagccgac	agtgaaggga	aagagatctt	ctccctgctg	ccccacatgg	ctgacatgtc	960
aacctacatg	ttcaaaggca	tcacagcttt	tgccaaagtc	atctcctact	tcagggaactt	1020
gcccacgcag	gaccagatct	ccctgctgaa	gggggcccgt	ttcgagctgt	gtcaactgag	1080
attcaacaca	gtgttcaacg	cggagactgg	aacctgggag	tgtggccggc	tgctcctactg	1140
cttgggaagac	actgcagggtg	gcttccagca	acttctactg	gagcccatgc	tgaaattcca	1200
ctacatgctg	aagaagctgc	agctgcatga	ggaggagtat	gtgctgatgc	aggccatctc	1260
cctctttctcc	ccagaccgcc	caggtgtgct	gcagcaccgc	gtggtggacc	agctgcagga	1320
gcaattcgcc	attactctga	agtcctacat	tgaatgcaat	cggccccagc	ctgctcatag	1380
gttcttggttc	ctgaagatca	tggctatgct	caccgagctc	cgcagcatca	atgctcagca	1440
cacccagcgg	ctgctgcgca	tccaggacat	acaccccttt	gctacgcccc	tcatgcagga	1500
gttggttcggc	atcacaggta	gctgagcggc	tgcccttggg	tgacacctcc	gagaggcagc	1560
cagacccaga	gcccctctgag	ccgccactcc	cggggccaaga	cagatggaca	ctgccaagag	1620
ccgacaatgc	ctgctgggcc	tgtctcccta	gggaattcct	gctatgacag	ctggctagca	1680
ttcctcagga	aggacatggg	tgccccccac	ccccagttca	gtctgtaggg	agtgaagcca	1740
cagattctta	cgtggagagt	gcactgacct	gtaggctcagg	accatcagag	aggcaagggtt	1800
gcccttttcc	tttaaaaggc	cctgtgggtc	ggggagaaat	ccctcagatc	ccactaaagt	1860
gtcaattgtg	ggaaggacc	aagcgaccaa	ggataggcca	tctgggggtc	atgccacat	1920
acccacgttt	gttcgcttcc	tgagtccttt	cattgctacc	tctaatagtc	ctgtctccca	1980
cttcccactc	gttcccctcc	tcttccgagc	tgctttgtgg	gctccaggcc	tgtactcatc	2040
ggcagggtgca	tgagtatctg	tgggagtcct	ctagagagat	gagaagccag	gaggcctgca	2100
ccaaatgtca	gaagcttggc	atgacctcat	tccggccaca	tcattctgtg	tctctgcatc	2160
catttgaaca	cattattaag	caccgataat	aggtagcctg	ctgtggggta	tacagcattg	2220
actcagatat	agatcctgag	ctcacagagt	ttatagttaa	aaaaacaaac	agaaacacaa	2280
acaatttggg	tcaaaaggag	aatgataag	tgacaaaagc	agcacaagga	atttccctgt	2340
gtggatgctg	agctgtgatg	gcgggcactg	ggtacccaag	tgaaggttcc	cgaggacatg	2400
agtctgtagg	agcaagggca	caaactgcag	ctgtgagtg	gtgtgtgtga	tttgggtgtg	2460
gtaggctctg	ttgccacttg	atggggcctg	ggtttgttcc	tggggctgga	atgctgggta	2520
tgctctgtga	caaggctacg	ctgacaatca	gttaaacaca	ccggagaaga	accattttaca	2580
tgcaccttat	atttctgtgt	acacatctat	tctcaaagct	aaagggtatg	aaagtgcctg	2640
ccttgtttat	agccacttgt	gagtaaaaaat	ttttttgcat	tttcacaaat	tatactttat	2700
ataaggcatt	ccacaccta	gaactagttt	tgggaaatgt	agccctgggt	ttaatgtcaa	2760
atcaaggcaa	aaggaattaa	ataatgtact	tttggctaga	ggggtaaaact	tttttggcct	2820
ttttctgggg	aaaataatgt	gggggtgtgg				2850

<210> 18  
 <211> 473  
 <212> PRT  
 <213> Homo sapien (human)

<400> 18  
 Met Thr Val Thr Arg Thr His His Phe Lys Glu Gly Ser Leu Arg Ala  
 1 5 10 15

Pro Ala Ile Pro Leu His Ser Ala Ala Ala Glu Leu Ala Ser Asn His  
 20 25 30  
 Pro Arg Gly Pro Glu Ala Asn Leu Glu Val Arg Pro Lys Glu Ser Trp  
 35 40 45  
 Asn His Ala Asp Phe Val His Cys Glu Asp Thr Glu Ser Val Pro Gly  
 50 55 60  
 Lys Pro Ser Val Asn Ala Asp Glu Glu Val Gly Gly Pro Gln Ile Cys  
 65 70 75 80  
 Arg Val Cys Gly Asp Lys Ala Thr Gly Tyr His Phe Asn Val Met Thr  
 85 90 95  
 Cys Glu Gly Cys Lys Gly Phe Phe Arg Arg Ala Met Lys Arg Asn Ala  
 100 105 110  
 Arg Leu Arg Cys Pro Phe Arg Lys Gly Ala Cys Glu Ile Thr Arg Lys  
 115 120 125  
 Thr Arg Arg Gln Cys Gln Ala Cys Arg Leu Arg Lys Cys Leu Glu Ser  
 130 135 140  
 Gly Met Lys Lys Glu Met Ile Met Ser Asp Glu Ala Val Glu Glu Arg  
 145 150 155 160  
 Arg Ala Leu Ile Lys Arg Lys Lys Ser Glu Arg Thr Gly Thr Gln Pro  
 165 170 175  
 Leu Gly Val Gln Gly Leu Thr Glu Glu Gln Arg Met Met Ile Arg Glu  
 180 185 190  
 Leu Met Asp Ala Gln Met Lys Thr Phe Asp Thr Thr Phe Ser His Phe  
 195 200 205  
 Lys Asn Phe Arg Leu Pro Gly Val Leu Ser Ser Gly Cys Glu Leu Pro  
 210 215 220  
 Glu Ser Leu Gln Ala Pro Ser Arg Glu Glu Ala Ala Lys Trp Ser Gln  
 225 230 235 240  
 Val Arg Lys Asp Leu Cys Ser Leu Lys Val Ser Leu Gln Leu Arg Gly  
 245 250 255  
 Glu Asp Gly Ser Val Trp Asn Tyr Lys Pro Pro Ala Asp Ser Gly Gly  
 260 265 270  
 Lys Glu Ile Phe Ser Leu Leu Pro His Met Ala Asp Met Ser Thr Tyr  
 275 280 285  
 Met Phe Lys Gly Ile Ile Ser Phe Ala Lys Val Ile Ser Tyr Phe Arg  
 290 295 300  
 Asp Leu Pro Ile Glu Asp Gln Ile Ser Leu Leu Lys Gly Ala Ala Phe  
 305 310 315 320  
 Glu Leu Cys Gln Leu Arg Phe Asn Thr Val Phe Asn Ala Glu Thr Gly  
 325 330 335  
 Thr Trp Glu Cys Gly Arg Leu Ser Tyr Cys Leu Glu Asp Thr Ala Gly  
 340 345 350  
 Gly Phe Gln Gln Leu Leu Leu Glu Pro Met Leu Lys Phe His Tyr Met  
 355 360 365  
 Leu Lys Lys Leu Gln Leu His Glu Glu Tyr Val Leu Met Gln Ala  
 370 375 380  
 Ile Ser Leu Phe Ser Pro Asp Arg Pro Gly Val Leu Gln His Arg Val  
 385 390 395 400  
 Val Asp Gln Leu Gln Glu Gln Phe Ala Ile Thr Leu Lys Ser Tyr Ile  
 405 410 415  
 Glu Cys Asn Arg Pro Gln Pro Ala His Arg Phe Leu Phe Leu Lys Ile  
 420 425 430  
 Met Ala Met Leu Thr Glu Leu Arg Ser Ile Asn Ala Gln His Thr Gln  
 435 440 445  
 Arg Leu Leu Arg Ile Gln Asp Ile His Pro Phe Ala Thr Pro Leu Met  
 450 455 460  
 Gln Glu Leu Phe Gly Ile Thr Gly Ser  
 465 470

<210> 19  
 <211> 20  
 <212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 19

aagcccttgc atccttcaca

20

<210> 20

<211> 27

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 20

ccatcctaatacgcactcact atagggc

27

<210> 21

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 21

gtaccgagct cggatccact a

21

<210> 22

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 22

ccgccagtgt gatggatatt

21

<210> 23

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 23

ctcatctgctg ttgacactgg g

21

<210> 24

<211> 18

<212> DNA

<213> Artificial Sequence

<220>

<223> Oligonucleotide

<400> 24

tgaactcaaa ggaggtca

18